

Rec'd PTO 18 APR 2005

#4.

**FAX TRANSMISSION****DATE:** April 18, 2005**PTO IDENTIFIER:** Application Number 10/523,146  
Patent Number**Inventor:** Yoichi Kobayashi et al.**MESSAGE TO:** US Patent and Trademark Office**FAX NUMBER:** (703) 305-3230 Attn: Shakeel Ahmed**FROM:** DARBY & DARBY P.C.

Chris T. Mizumoto

**PHONE:** (212) 527-7700**Attorney Dkt. #:** 20241/0202215-US0**PAGES (Including Cover Sheet):** 7**CONTENTS:** Response to Notification of Missing Requirements (2 pgs.)  
Copy of Notice of Missing Requirements under 35 U.S.C. 371 (2 pgs.)  
Copy of first page of PCT WO 2004/009829 (1 pg.)  
Certificate of Transmission (1 pg)

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Application No. (if known): 10/523,146

Attorney Docket No.: 20241/0202215-US0

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Response to Notification of Missing Requirements (2 pgs.)

Copy of Notice of Missing Requirements under 35 U.S.C. 371 (2 pgs.)

Copy of first page of PCT W0 2004/009829 (1 pg.)

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Dated: \_\_\_\_\_

Docket No.: 20241/0202215-US0  
(PATENT)**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Yoichi Kobayashi et al.

Confirmation No. 3637

Application No.: 10/523,146

Filed: January 21, 2005

Art Unit: N/A

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For: PROCESS FOR THE PRODUCTION OF  
METHIONINE

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Examiner: Not Yet Assigned

**RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS**  
**UNDER 35 USC §371**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This is filed in response to a Notification of Missing Requirements Under 35 USC §371 dated April 7, 2005. The Notification stated that because the name of the fourth inventor, Yoshinori Mizui, as published in WO 2004/009829 A1, is different from the signed inventor's name, Ryosuke Mizui, the currently filed declaration does not comply with 37 CFR 1.497(a) and (b).

I, Chris Mizumoto, attorney of record, attest to the following facts:

(1) The fourth inventor's English name, Yoshinori Mizui, listed in the PCT publication, WO 2004/009829 A1, is a mistranslation and miss-enunciation of the same inventor's Japanese name, "水井良典," which is listed next to the English name in the same PCT publication. Exhibit I provided herein shows the cover page of the PCT publication with the name in question circled.

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Application No.: 10/523,146

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Docket No.: 20241/0202215-USO

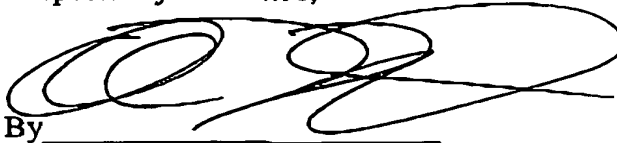
(2) The fourth Japanese inventor's name, "水井良典," is correctly enunciated and written as "Ryousuke Mizui" and not "Yoshinori Mizui." This is why the Declaration filed on March 22, 2005 provides the signature of this name rather than that of Yoshinori Mizui.

(3) It is possible to pronounce and write "水井良典" in English as Yoshinori Mizui or Ryousuke Mizui. Given this fact, in WO 2004/009829 A1, the English name of the fourth inventor was incorrectly translated into Yoshinori Mizui. However, the actual name in English of the fourth inventor is written and pronounced, Ryousuke Mizui.

Thus, it is kindly requested that the Declaration submitted to the USPTO on March 22, 2005 be accepted as it reflects the true name of the fourth inventor, Ryousuke Mizui.

Dated: April 18, 2005

Respectfully submitted,



By

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(12)特許協力条約に基づいて公開された国際出願

(19) 世界知的所有権機関  
国際事務局(43) 国際公開日  
2004 年1 月29 日 (29.01.2004)

PCT

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WO 2004/009829 A1

(51) 国際特許分類: C12P 13/12, C07C 319/28, 323/58

(21) 国際出願番号: PCT/JP2003/009268

(22) 国際出願日: 2003 年7 月22 日 (22.07.2003)

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(26) 国際公開の言語: 日本語

(30) 優先権データ:  
特願2002-214508 2002 年7 月23 日 (23.07.2002) JP(71) 出願人 (米国を除く全ての指定国について): 日本  
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(JP).(81) 指定国 (国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB,  
BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK,  
DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI,  
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,  
SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.(84) 指定国 (広域): ARIPO 特許 (GH, GM, KE, LS, MW, MZ,  
SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア特許 (AM,  
AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ特許  
(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB,  
GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR),  
OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).添付公開書類:  
— 国際調査報告書2文字コード及び他の略語については、定期発行される  
各PCTガゼットの巻頭に掲載されている「コードと略語  
のガイダンスノート」を参照。

(54) Title: PROCESS FOR THE PRODUCTION OF METHIONINE

(54) 発明の名称: メチオニンの製造法

(57) Abstract: The invention relates to a practical process for the production of methionine by converting a raw material capable of forming methionine through hydrolysis into methionine by the use of a biocatalyst, which permits repeated use of the biocatalyst, increased accumulation of methionine dissolved in the reaction fluid, and recovery of methionine in the form of a solid product from the reaction fluid, specifically, a process for the production of methionine which comprises the first step of hydrolyzing a raw material capable of forming methionine through hydrolysis, e.g., 2-amino-4-methylthiobutyronitrile or 2-amino-4-methylthiobutanamide, in an aqueous ammonia solution with a biocatalyst to form a methionine-containing aqueous ammonia solution, the second step of separating the methionine-containing aqueous ammonia solution from the biocatalyst, and the third step of distilling off ammonia from the resulting methionine-containing aqueous ammonia solution to precipitate and separate crystals of methionine.

(57) 要約: 本発明は、加水分解によりメチオニンを生成しうる物質を原料として、生体触媒を用いてメチオニンに変換する際、生体触媒の繰り返し使用が可能であって、反応液中のメチオニンの溶解量を増加させるとともに、反応液からメチオニンを固形品として得る実用的なメチオニンの製造法である。詳しくは、2-アミノ-4-メチルチオブタン酸アミド等の加水分解によりメチオニンを生成しうる原料物質をアンモニア水溶液中で生体触媒によって加水分解して含メチオニンアンモニア水溶液に変換する第1工程、前記第1の工程で得られる含メチオニンアンモニア水溶液を生体触媒と分離する第2の工程、前記第2工程で分離された含メチオニンアンモニア水溶液よりアンモニアを除去しメチオニン結晶を析出・分離する第3工程によりメチオニンを製造する方法である。

WO 2004/009829 A1



## UNITED STATES PATENT AND TRADEMARK OFFICE

C. T. Mizumoto

 UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/523,146	Yoichi Kobayashi	20241/0202215-USO

INTERNATIONAL APPLICATION NO.
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PCT/JP03/09268

LA. FILING DATE	PRIORITY DATE
07/22/2003	07/23/2002

 7278  
 DARBY & DARBY P.C.  
 P. O. BOX 5257  
 NEW YORK, NY 10150-5257

 FILE: June 7, 2005  
 Declared on 4/13/05 by LK for  
 Declared without file ☐  
 Attorney \_\_\_\_\_

 CONFIRMATION NO. 3637  
 371 FORMALITIES LETTER  
 \*OC000000015670658\*  
 \*OC000000015670658\*

Date Mailed: 04/07/2005

11/7/2005

**NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)**

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 01/21/2005
- English Translation of the IA filed on 01/21/2005
- Copy of the International Search Report filed on 01/21/2005
- Copy of IPE Report filed on 01/21/2005
- Preliminary Amendments filed on 01/21/2005
- Information Disclosure Statements filed on 01/21/2005
- Oath or Declaration filed on 03/22/2005
- Request for Immediate Examination filed on 01/21/2005
- U.S. Basic National Fees filed on 01/21/2005
- Assignment filed on 03/22/2005
- Priority Documents filed on 01/21/2005
- Power of Attorney filed on 03/22/2005

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the international application number and international filing date. The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) in that it:
  - Name of the forth inventor published as Yoshinori MIZUI, and signed on the declaration as Ryousuke MIZUI.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

SHAKEEL AHMED

Telephone: (703) 308-9140 EXT 208

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/523,146	PCT/JP03/09268	20241/0202215-US0

FORM PCT/DO/EQ/905 (371 Formalities Notice)